



# Addendum to the Environmental Study

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in support of the  
Proposed East-West Connector, Northern Utah County

Utah Department of Transportation



UDOT Project No. S-R399(12)

Prepared by  
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June 2008



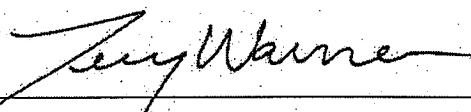
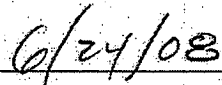
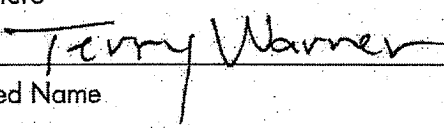


## Environmental Study Documentation: Addendum

Project Name	Northern Utah County, East/West Connections (also known as East-West Connector)		
Project No.	S-R399(12)	PIN	5992
Prepared by	HDR Engineering, Inc. (Vince Izzo and Sue Lee)	Date	Original: 3/19/08 Revisions: 6/24/08
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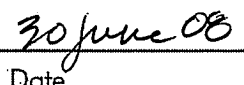
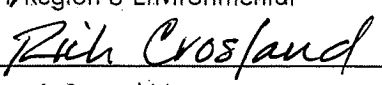
### REQUIRED SIGNATURES

I have reviewed the information presented in this **Revised Environmental Study** and I hereby attest that the document is complete and the details of the document are correct.

	
Reviewers Signature	Date
	
Reviewer's Printed Name	

### STATE-FUNDED PROJECTS

As a result of this Environmental Study, UDOT finds that this project will NOT cause significant environmental impacts.

Review/Approved		
	UDOT Region 3 Environmental	Date
		
	Reviewer's Printed Name	



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## **1.0 Introduction**

This document provides the changes that have been made to the East-West Connector Environmental Study since its release in March 2008. The changes are identified with underline indicating new text and strikeout for those portions of the study that have been revised. UDOT made these revisions because of minor changes to the project description and in response to comments received from the public.

## 2.0 Changes to Environmental Study Documentation: Addendum

### **Changes to the Action Alternative Impacts and Mitigation Summary Table (page S-4)**

*The following text has been added to this table in the Mitigation column for Water Resources:*

Prior to construction, UDOT will perform a hydraulic analysis of the impact of bank stabilization on the function of the Jordan River floodway and floodway fringe. If placing bank stabilization would adversely affect the flood-carrying capacity of the Jordan River, UDOT will coordinate with the Federal Emergency Management Agency (FEMA) to document any changes to the regulatory floodway.

If final project design results in direct effects to federal flood-control levees, UDOT will analyze the nature and extent of effects and submit the results to the U.S. Army Corps of Engineers (USACE) for compliance according to 33 Code of Federal Regulations (CFR) 208. Furthermore, if an affected levee is accredited by FEMA and forms the basis for floodplain delineations, UDOT will conduct an analysis to determine compliance with current design criteria according to 44 CFR 65.10.



## 3.0 Changes to Chapter 2, Alternatives

### **Changes to Section 2.3.2.2, Description of the Action Alternative (page 2-16)**

#### **Cross Streets and Structures**

The EWC would have at-grade intersections with north-south-oriented cross streets between Redwood Road and the connection to I-15 at 300 East in Lehi. Intersections with traffic signals and dedicated right- and left-turn lanes would be provided at Redwood Road in Saratoga Springs and at 2300 West, 1700 West, 1100 West, 500 West, Center Street, and 300 East in Lehi. Because the EWC would be classified as a limited-access facility, no access would be allowed to the EWC except at cross streets with traffic signals.

The following structures would be included with the project:

- A bridge spanning the Jordan River
- Culverts for ditches and drainage canals, including a culvert for Dry Creek

[Bank stabilization would be required at the Jordan River crossing due to existing hydraulic conditions. Stabilization would occur on the west bank of the river at the bridge site and in an area about 300 feet upstream and about 250 feet downstream of the bridge.](#)

## 4.0 Changes to Chapter 4, Environmental Consequences

### Changes to the Introductory Text to Chapter 4 (page 4-1)

As described in Chapter 2, Alternatives, the Action Alternative is a new road on an alignment that starts at SR 68 (Redwood Road) and about 600 North in Saratoga Springs and ends about 4 miles to the east at about 1000 South 300 East in Lehi (see Figure 4-1, Action Alternative). In summary, the Action Alternative consists of the following elements:

- Four travel (through) lanes with a center raised median in a 105-foot-wide right-of-way
- Dedicated center turn lanes at breaks in the median and right-turn lanes at major intersections
- An 8-foot shoulder, 2.5-foot curb and gutter, 4-foot park strip, and 6-foot sidewalk on both sides of the road
- A single-span, 257-foot-long bridge over the Jordan River [and associated bank stabilization](#)
- Culverts for ditches and drainage canals, including Dry Creek

### Changes to Table 4.4-1, Results of the Noise Barrier Mitigation Analysis (page 4-10)

**Table 4.4-1. Results of the Noise Barrier Mitigation Analysis**

Barrier Site <sup>a</sup>	Reasonable and Feasible Based on Barrier Height? <sup>b</sup>					
	6 Feet	8 Feet	10 Feet	12 Feet	14 Feet	16 Feet
North side 1	Yes	Yes	No	Yes	Yes	Yes
North side 2	No	No	Yes	No	No	No
North side 3	No	Yes	Yes	Yes	Yes	Yes
North side 4	Not feasible at any height					
North side 5	<a href="#">No</a>	<a href="#">No</a>	<a href="#">Yes</a>	<a href="#">Yes</a>	<a href="#">No</a>	<a href="#">No</a>
<del>North side 5</del>	<del>Not feasible at any height</del>					
South side 1	Yes	Yes	Yes	Yes	Yes	Yes
South side 2	<a href="#">No</a>	<a href="#">No</a>	<a href="#">No</a>	<a href="#">Yes</a>	<a href="#">No</a>	<a href="#">No</a>
<del>South side 2</del>	<del>Not feasible at any height</del>					
South side 3	Not feasible at any height					
South side 4	Yes	Yes	Yes	Yes	Yes	<del>Yes</del> <a href="#">No</a>

<sup>a</sup> As shown in Figure 4-3 through Figure 4-5, Noise Impacts.

<sup>b</sup> Yes = reasonable and feasible according to UDOT Policy 08A2-1.

### **Changes to Section 4.5.2.1, Wildlife Habitats (page 4-12)**

***Open Water and Riparian.*** The Action Alternative would remove about 2.5 acres of riparian habitat, primarily habitat that borders both shores of the Jordan River. Specifically, constructing the approaches to a single-span bridge over the river would remove this habitat. Because of historic modifications and land practices, riparian areas are currently dominated by invasive and exotic species such as saltcedar, Russian olive, and common reed. Removing about 2.5 acres of this mostly invasive and exotic vegetation to construct the approaches to the bridge would not substantially affect the abundance and distribution of riparian habitat or its function in and immediately adjacent to the EWC project area.

Bank stabilization along the west bank of the Jordan River would result in direct impacts to the river bank. Stabilization would involve placing material such as rip rap or Conlock blocks (a commercial product used for bank stabilization) along a section of the riverbank that is degraded and unstable (HDR 2008).

### **Changes to Section 4.5.2.2, Fish and Wildlife (page 4-14)**

With respect to aquatic habitats, such as that found within the Jordan River channel, only minor construction-related impacts would occur, since the river would be completely spanned and only the west bank would be directly affected during bank stabilization. ~~No~~ structures (such as pilings) would be placed in the aquatic environment. Impacts during construction, such as sedimentation, would be minor and would be controlled by using best management practices (BMPs). ~~No permanent impacts to the aquatic environment are expected from the EWC project.~~ The permanent impacts to the aquatic environment that are expected as a result of bank stabilization would not adversely affect the life cycles of aquatic organisms and might improve the water quality along this degraded section of stream bank.

### **Changes to Section 4.5.2.3, Special-Status Species (page 4-16)**

***June Sucker (Endangered).*** This species is known to occur only in Utah Lake (year-round) and the Provo River (during spawning), although some possible hybrids with the Utah sucker have been recorded in the American Fork River. However, the Provo River is the only known spawning river for this species (June Sucker Recovery Implementation Program, no date). Because the June sucker is not known to spawn in or travel in Dry Creek, any channel alterations and construction conducted for the Action Alternative around Dry Creek would have no effect on this species. The June sucker has not been recorded in the

Jordan River, and the river would be spanned with ~~no~~-limited construction activities occurring on the west bank of ~~within~~-the channel. Therefore, any construction near the Jordan River for the Action Alternative would not affect the June sucker.

### **Changes to Section 4.6.3.1, Floodplains (pages 4-20 to 4-22)**

#### **Impacts**

The Action Alternative would require the construction of two hydraulic structures: ~~—~~a bridge over the Jordan River and a culvert over Dry Creek ~~—and~~ would require bank stabilization along the Jordan River. The floodplain impacts associated with these ~~streams~~-activities are discussed in the following paragraphs.

The Action Alternative includes a single-span, approximately 257-foot-long bridge over the Jordan River. Due to the regulatory floodplain, the structure would be designed to accommodate a 100-year or greater magnitude flood (one with a 1% annual chance of occurring). Material associated with bank stabilization along the west bank would affect 0.17 acre of the regulatory floodway (0.01 acre of Zone AE floodway and 0.16 acre of Zone AE floodway fringe (see Figure 4-6, Jordan Bank Stabilization Details). The east bridge approach (contained within the 120-foot right-of-way) would be placed on 0.4 acre of Zone AE floodway fringe (see Figure 4-7, Floodplain Impacts Associated with the Jordan River Crossing). The bank stabilization is assumed to be placed at existing grades and constructed so that the size and flood-carrying capacity of the existing Jordan River channel are maintained. ~~The proposed structure would not affect the regulatory floodway (see Figure 4-6, Floodplain Impacts Associated with the Jordan River Crossing). The east bridge approach would be placed in 0.4 acre of Zone AE floodway fringe.~~

There is a shallow flooding area, designated by FEMA as Zone AH, in the east overbank of the Jordan River. The road would traverse this area and would affect 8.9 acres of regulatory floodplain. To avoid floodplain impacts outside the right-of-way, equalization culverts or some other means of maintaining hydraulic connectivity across the roadway embankment would be required.

The Action Alternative would require a culvert to be placed at Dry Creek; however, there is no regulatory floodplain at this location. The UDOT Manual of Instruction – Roadway Drainage (UDOT 2005) would be used to determine the design flood for the structure (that is, the flood that the structure will be designed to accommodate).

## Mitigation

Measures will be taken to reduce floodplain impacts and to ensure that constructing the EWC complies with all applicable regulations. These measures include the following:

- The Action Alternative will require two stream crossings. The design of hydraulic structures will follow the UDOT Manual of Instruction and FEMA requirements, where applicable, to determine the design flood.
- UDOT or its construction contractor will obtain stream alteration permits from the Utah Division of Water Rights for all stream crossings. UDOT or its construction contractor will file a General Permit application with the Utah Division of Forestry, Fire, and State Lands to obtain an easement over and/or upon the stream bed. UDOT or its construction contractor will obtain floodplain development permits for all locations where the proposed roadway would encroach on a regulatory floodplain, and structures will be designed to meet the more stringent of FEMA requirements or local floodplain ordinances.
- Roadway elevations will be above adjacent floodplain elevations so that flooding will not interfere with a transportation facility needed for emergency vehicles or evacuation.
- In shallow flooding areas (Zone AH), floodplain equalization culverts or other surface water conveyance structures will be installed to allow flood waters to flow freely between the northern and southern sides of the road. The conveyance structures will also be designed to maintain wetland hydrology if feasible. Furthermore, erosion-control measures will be implemented at these structure locations.
- [Prior to construction, UDOT will perform a hydraulic analysis of the impact of bank stabilization on the flood-carrying capacity of the Jordan River floodway and floodway fringe. If placing bank stabilization would adversely affect the floodway and increase flood elevations, UDOT will coordinate with local officials and the Federal Emergency Management Agency \(FEMA\) to document any changes to the regulatory floodway.](#)
- [If final project design results in direct effects to federal flood-control levees, UDOT will analyze the nature and extent of effects and submit the results to the USACE for compliance according to 33 CFR 208. Furthermore, if an affected levee is certified and accredited by FEMA and forms the basis for floodplain delineations, UDOT will conduct an](#)

[analysis to determine compliance with current design criteria according to 44 CFR 65.10.](#)

### Changes to Section 4.6.3.2, Waters of the United States (pages 4-22 to 4-24)

#### Impacts

The Action Alternative would result in the discharge of fill material directly to 17 ditches, [0.19 acre of open water](#), 0.76 acre of Category III (lower-quality) forested wetlands, 0.56 acre of Category I (high-quality) emergent marsh wetlands, and 2.34 acres of Category III (lower-quality) emergent marsh wetlands. Table 4.6-1, Table 4.6-2 below, and Figure 4-7, Wetland Impacts, summarize these impacts.

**Table 4.6-1. Summary of Impacts to Ditches**

Ditch Number <sup>a</sup>	Acres of Impact
4	0.02
5	0.05
6 <sup>b</sup>	0.31
7	0.06
8	0.03
11	0.01
13	0.07
19	0.19
31	0.03
32	0.12
37	0.02
38	0.01
40	0.09
42	0.01
43	0.03
44	0.01
45	0.01
<b>Total ditch impact</b>	<b>1.07</b>

<sup>a</sup> As listed in the *Wetland Delineation Report in Support of the Proposed East-West Connector, Northern Utah County* (HDR 2007b).

<sup>b</sup> Dry Creek.

**Table 4.6-2. Summary of Impacts to Wetlands and  
Other Waters of the United States**

Wetland Type <sup>a</sup>	Wetland Identifier <sup>b</sup>	Wetland Functional Category <sup>c</sup>	Total Size of Wetland	Acres of Impact	Percent of Wetland Feature Affected
PFO	H	III	15.06	0.50	3.3%
PFO	V	III	2.55	0.26	10.2%
				<b>0.76</b>	
PEM	P	III	28.77	0.87	3.0%
PEM	U	III	17.90	1.47	8.2%
PEM	CC	I	3.24	0.56	17.3%
				<b>2.90</b>	
Total wetland impacts				<b>3.66</b>	
<u>OW</u>	<u>Jordan River</u>	<u>NA</u>	<u>NA</u>	<u>0.19</u>	<u>NA</u>

<sup>a</sup> PFO = palustrine forested wetland

PEM = palustrine emergent marsh wetland

OW = open water (below ordinary high-water mark)

<sup>b</sup> All wetlands are as described in the *Wetland Delineation Report in Support of the Proposed East-West Connector, Northern Utah County* (HDR 2007b) and addendums to that report.

<sup>c</sup> Category I = wetlands that (1) have a low level of disturbance; (2) provide habitat for federally listed or proposed threatened and endangered plant or animal species, or for a species rated S1 by the Utah Natural Heritage Program; or (3) have plant communities that largely consist of native plant species.

Category III = common, less diverse, small, and isolated wetlands.

The Jordan River would be crossed using a single-span bridge. Bank stabilization upstream of, downstream of, and under the bridge on the river's west bank would result in the discharge of a maximum of 311 cubic yards of material to a 0.19-acre area below the ordinary high-water mark (OHWM) of the river (the OHWM is the regulatory limit for the river under the Clean Water Act).

~~Construction would not require fill to be placed below the 100-year flood limit of the river (and therefore would not result in the discharge of fill below the ordinary high-water mark). The Action Alternative would not affect the Jordan River.~~

Actual direct ditch impacts would be minimized by converting the minimum area necessary to piped flow under the road. Culverts would be sized so that existing flow volumes would be maintained. A maximum of 1.07 acres of ditch would be converted to piped flow.

Wetland impacts have been avoided and minimized to the extent practicable by careful consideration of the proposed alignment. As shown in Figure 4-7, wetland impacts are not complete fills of the affected features but rather fill of a portion of each feature. The remaining partial wetland areas and other nearby wetlands could be indirectly affected by sedimentation or hydrologic interruption. Both the Clean Water Act and the federal “no net loss” policy require complete compensation for 0.76 acre of impact to forested wetlands and 2.90 acres of impact to emergent marsh wetlands. Of the wetlands permanently affected, 0.54 acre of emergent marsh is of high quality (Category I). The remaining 2.34 acres of emergent marsh and the 0.76 acre of forested wetlands are lower-quality (Category III) wetlands.

### Mitigation

UDOT is currently working with USACE to establish a wetland mitigation bank in northern Utah County. UDOT intends to use credits from this bank to mitigate wetland impacts associated with projects sponsored by UDOT that occur in the same watershed. UDOT anticipates that mitigation credits from the bank will be used to fully compensate for permanent wetland impacts associated with the EWC project. Full compensation will ensure that the project does not result in a net loss of wetlands. Mitigation for this impact is as follows:

As part of the Clean Water Act Section 404 permitting process, UDOT will prepare and implement a mitigation plan that fully compensates for the permanent loss of 0.76 acre of Category III forested wetland, 0.56 acre of Category I emergent marsh wetland, and 2.34 acres of Category III emergent marsh wetland. Mitigation ratios, which will be negotiated with the USACE, will be based on wetland quality. The mitigation plan will be approved by the UDOT Region 3 Landscape Architect and by the UDOT Environmental Services Landscape Architect before it is sent to the USACE for review and approval.

The project will also result in the permanent loss of non-wetland waters of the United States, as listed in Table 4.6-1 above, Summary of Impacts to Ditches, [and Table 4.6-2, Summary of Impacts to Wetlands and Other Waters of the United States](#). UDOT is proposing to mitigate these permanent ditch impacts as well as potential indirect but permanent impacts to wetlands not subject to fill as follows:

Direct impacts to jurisdictional ditches, [the Jordan River](#), and non-jurisdictional riparian areas and indirect impacts to wetlands will be mitigated through a project-based restoration plan. This plan will focus on restoration of existing degraded riparian areas and adjacent stream channels, such as the Jordan River and Dry Creek, that are affected during construction but will also address post-



construction restoration of areas adjacent to remaining wetlands and ditch features in or near the area of effect (project footprint). Restoration of riparian areas and channels could involve recontouring creekside areas and revegetating creek banks with native riparian vegetation. All riparian and channel restoration activities will be conducted so that the channels will retain their ability to carry stormwater runoff in a manner that prevents downstream sedimentation and flooding. Restoration in other areas will involve recontouring to restore natural water flow patterns (both in ditches and overland in wetland complexes) and revegetation of disturbed areas. A final restoration plan will be approved by the UDOT Region 3 Landscape Architect and by the UDOT Environmental Services Landscape Architect before it is sent to the USACE for review and approval.

#### **Changes to Section 4.8.2.4, Community Facilities (page 4-32)**

##### **Impacts**

The Action Alternative could affect access to one community facility, Snow Springs Elementary School. The northern edge of the proposed EWC alignment is located about 300 feet south of the school at 1700 West in Lehi. The placement of the road in this location would require a designated school crossing of the new road. UDOT is proposing to accommodate the school crossing by incorporating an at-grade crossing that is consistent with AASHTO's and UDOT's design standards.

As described in Section 4.7, Air Quality Impacts, the project would not result in any exceedances of air quality standards. Placement of the road and an intersection at 1700 West would not result in any air quality impacts to the area around Snow Springs Elementary School.

The noise analysis completed for the EWC evaluated the noise impacts of the new road on Snow Springs Elementary School. As shown in Figure 4-3, Noise Impacts – 2300 West to 1700 West, Lehi, the project would not result in noise impacts to the elementary school.

During construction, equipment and excavations could pose a safety hazard for students who need to pass through the construction area on their way to and from school.

### Changes to Section 4.9.2.1, Impacts (page 4-35)

No known archaeological sites or paleontological resources would be directly affected by the Action Alternative.

The National Register–eligible property at about 905 South 1700 West (estimated address), which is on the north side of the proposed road corridor, would be directly affected by construction of new turn lanes from southbound 1700 West to westbound EWC. Coordination with the State Historic Preservation Officer (SHPO) will result in a Memorandum of Agreement (MOA) that addresses the appropriate mitigation for this direct impact. UDOT anticipates that the MOA will require UDOT to completely record the property before the existing structures are demolished and the site is graded. The Action Alternative would not affect any other architectural resources.

~~No known archaeological sites, architectural resources, or paleontological resources would be directly affected by the Action Alternative. The alternative would be located near the National Register–eligible property at about 905 South 1700 West (estimated address), but would pass south of the fenced area that contains the buildings and that is the relevant boundary for assessing project impacts. Given the extensive amount of modern residential development that has recently occurred directly adjacent to the buildings on this property, the setting and feeling of the property have already been compromised, and the architecture of the structures is the primary reason that this resource is considered eligible for the National Register. Since the buildings would not be affected by the Action Alternative, this alternative would result in a finding of No Historic Properties Affected/No Effect.~~

### Changes to Section 4.9.2.2, Mitigation (page 4-35)

Proposed mitigation for the direct impacts to the NRHP-eligible architectural property at about 905 South 1700 West (estimated address) consists of detailed documentation of the historic buildings and structures. This documentation will include black-and-white photographs, written architectural description, measured floor plans (where appropriate), a sketch property plan identifying the locations and spatial relationships of the various buildings and structures on the property, and a completed State Historic Preservation Office Historic Site Form (also known as an Intensive-Level Survey form). The MOA discussed in Section 4.9.2.1, Impacts, will contain specific stipulations that require these tasks to be completed before the buildings and structures are demolished and the site is graded.

~~No mitigation for impacts to cultural resources is proposed.~~

### **Changes to Section 4.13, References (page 4-47)**

[\[HDR\]](#) HDR Engineering, Inc.

- 2007a Memo to file regarding a field trip to the East-West Connector study area. Field trip attended by Kim Struthers and Lorin Powell of the City of Lehi, Sue Lee of HDR Engineering, and Bryan Adams of UDOT. October 22.
- 2007b Wetland delineation report in support of the proposed East-West Connector, northern Utah County. August. Addendums prepared in October and November.
- 2007c Phone record of conversation between Kimberly Hersey of the Utah Division of Wildlife Resources and Trent Toler of HDR Engineering regarding long-billed curlew and bobolink sightings in the project region. December 13.
- 2007d Notes from meetings with land developers in the East-West Connector evaluation area. October 2.

[2008 Bank stabilization technical memorandum for the Jordan River. May.](#)

### **Changes to Chapter 4 Figures (pages 4-49 to 4-55)**

*Figure 4-5 has been modified from the version in the March 2008 document. A new figure (Jordan Bank Stabilization Details) has been added to Chapter 4 as Figure 4-6. See the following pages for copies of these figures. The figures in Chapter 4 have been renumbered as follows:*

*Figure 4-1. Action Alternative*

*Figure 4-2. Artist's Rendering of the East-West Connector*

*Figure 4-3. Noise Impacts – 2300 West to 1700 West, Lehi*

*Figure 4-4. Noise Impacts – 1100 West to 500 West, Lehi*

*Figure 4-5. Noise Impacts – Center Street to 300 East, Lehi*

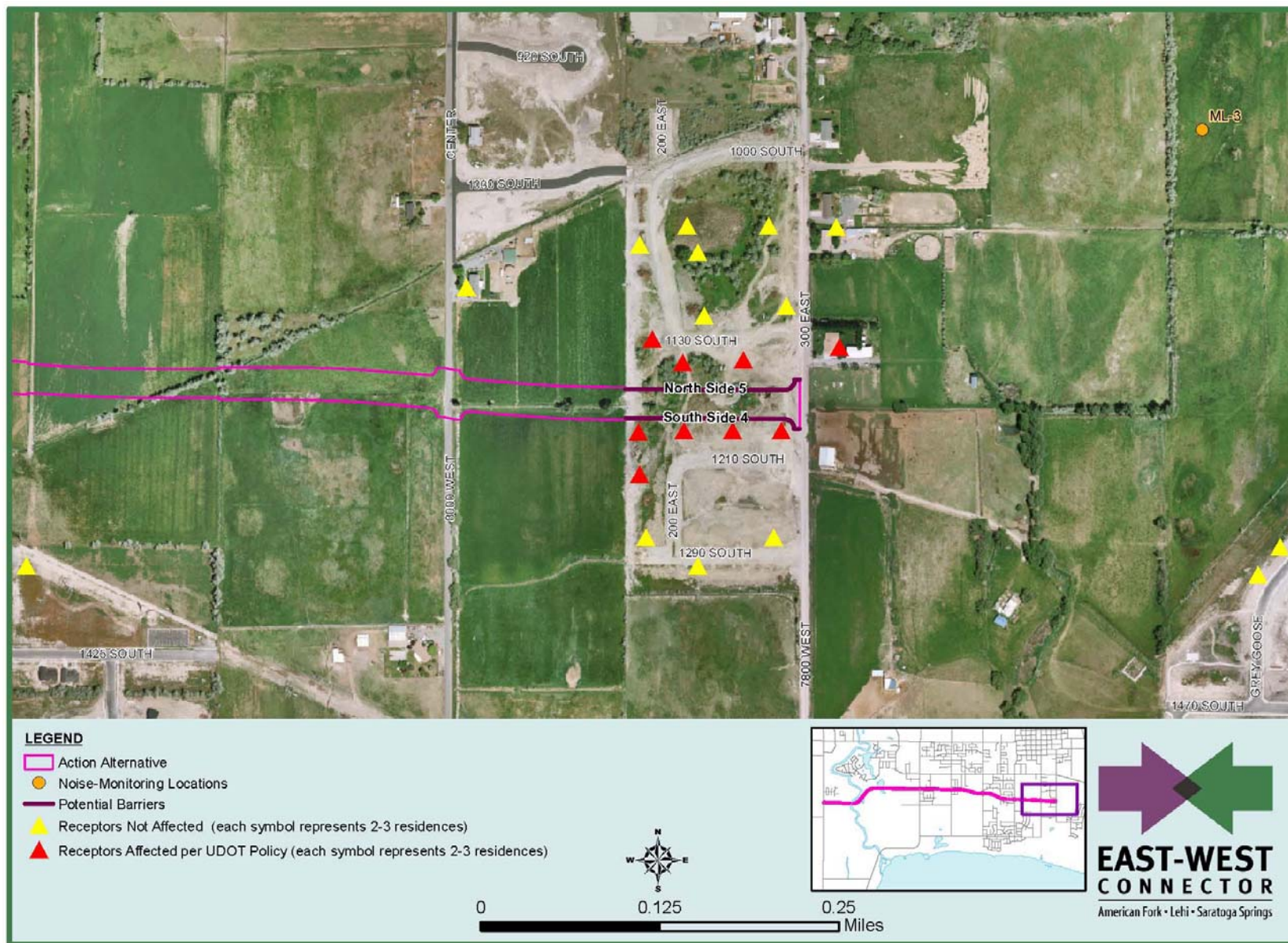
*Figure 4-6. Jordan Bank Stabilization Details*

*Figure 4-7. Floodplain Impacts Associated with the Jordan River Crossing*

*Figure 4-8. Wetland Impacts*

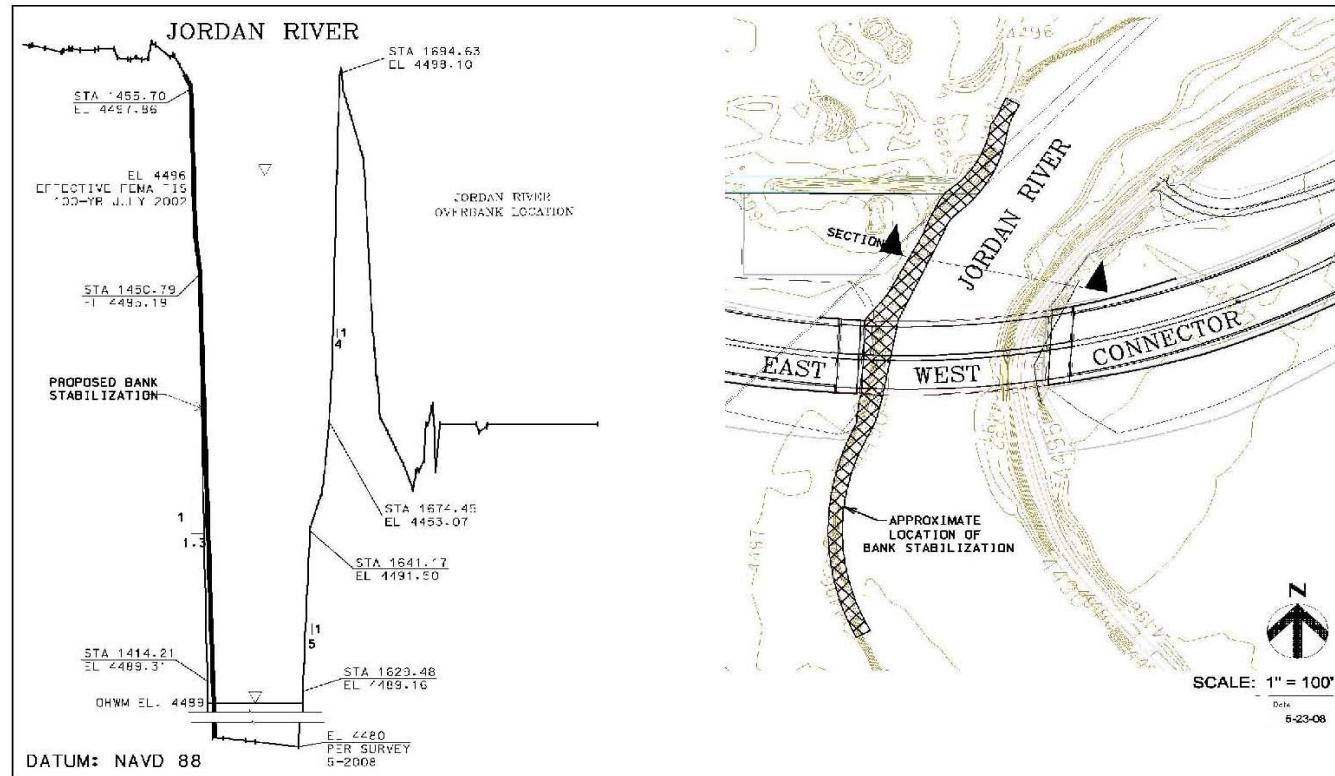
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**Figure 4-5. Noise Impacts – Center Street to 300 East, Lehi**





**Figure 4-6. Jordan Bank Stabilization Details**



*Note that the vertical scale of this figure is exaggerated.*

## **5.0 Changes to Appendix C, Agency Coordination and Public Involvement Summary**

*The signed Finding of Effect and Memorandum of Agreement on the following pages have been added to Appendix C beginning on page C-25.*

*This page is intentionally blank.*





State of Utah

JON M. HUNTSMAN, JR.  
*Governor*

GARY R. HERBERT  
*Lieutenant Governor*

DEPARTMENT OF TRANSPORTATION

JOHN R. NJORD, P.E.  
*Executive Director*

CARLOS M. BRACERAS, P.E.  
*Deputy Director*

07-2151  
**Received**  
MAY 12 2008  
**USHPO**

May 9, 2008

Mr. Cory Jensen  
National Register Coordinator and Architectural Historian  
Utah Division of State History  
300 Rio Grande  
Salt Lake City, UT 84101-1182

RE: Case # 07-2151  
UDOT Project Number: S-R399(12); East-West Connector Project, Lehi, Utah County.  
**Addendum Finding of Effect: Adverse Effect.**

Dear Mr. Jensen:

The Utah Department of Transportation (UDOT) is proposing to undertake the subject state-funded project. The project proposes to construct a new road in northern Utah County, providing a connector road between SR-68 (Redwood Road) and Interstate 15, through parts of Saratoga Springs, Lehi, and American Fork (see enclosed map).

In accordance with 16 U.S.C. §470 et seq. and Utah Code Annotated (U.C.A.) §9-8-404, the UDOT has taken into account the effects of this undertaking on historic properties, which could be eligible for the State or National registers, located within the project Area of Potential Effect (APE) and is affording the Utah State Historic Preservation Office (USHPO) an opportunity to comment on the undertaking and its effects.

This letter serves as an addendum to the Findings of Effect previously submitted to your office in March 2008. The original finding of the project was **No Historic Properties Affected**. Revisions to the roadway design have resulted in changes to those findings and the project will result in an **Adverse Effect**.

In order for the proposed East-West Connector to function at an acceptable level of service, improvements need to be made on roads adjacent and perpendicular to the new corridor. The design requires 1700 West to be widened to allow for dedicated turn lanes and requires the alignment to shift to the west (see enclosed map). It is not possible to shift the east since this would require the relocation of a modern residence and force an awkward angle at the intersection of 1700 West and 900 South. As a result


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of this design modification, the property located at 7905 South 1700 West, Lehi will have an **Adverse Effect**.

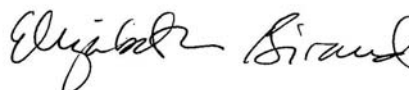
Overall, UDOT Project Number: S-R399(12); East-West Connector Project, Lehi, Utah County will result in an **Adverse Effect**.

Please review this document and, providing you agree with the findings contained herein, sign and date the signature line at the end of this letter. Should you have any questions or need additional information, please feel free to contact me at (801) 227-8062 or [jelsken@utah.gov](mailto:jelsken@utah.gov).

Sincerely,



Jennifer Elsken  
NEPA/NHPA Specialist  
UDOT Region 3



Elizabeth Giraud  
Architectural Historian  
UDOT

Enclosures

cc: Bryan Adams, UDOT R3  
Rich Crosland, UDOT R3

Regarding UDOT Project Number: S-R399(12); East-West Connector Project, Lehi, Utah County, I concur with the finding of effect, submitted to the Utah State Historic Preservation Office in accordance with U.C.A. 9-8-404, which states that the UDOT has determined that the finding is **Adverse Effect**.



Cory Jensen  
Architectural Historian/National Register & Survey Coordinator

5/12/08  
Date

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I-15 MOA

MEMORANDUM OF AGREEMENT  
BETWEEN  
THE UTAH DEPARTMENT OF TRANSPORTATION  
AND  
THE UTAH STATE HISTORIC PRESERVATION OFFICE  
REGARDING

**PROJECT # S-R399(12); EAST-WEST CONNECTOR PROJECT,  
LEHI, UTAH COUNTY**

**WHEREAS**, the Utah Department of Transportation (UDOT) proposes to undertake **PROJECT # S-R399(12); EAST-WEST CONNECTOR PROJECT, LEHI, UTAH COUNTY**, which involves constructing a new road in northern Utah County, connecting SR-68 (Redwood Road) and Interstate 15, through parts of Saratoga Springs, Lehi, and American Fork; and

**WHEREAS**, the UDOT has taken into account the effects of **PROJECT #S-R399(12); EAST-WEST CONNECTOR PROJECT, LEHI, UTAH COUNTY**, on historic properties and has determined that this undertaking will have an adverse effect on one (1) historic property eligible for inclusion in the National Register of Historic Places; and

**WHEREAS**, UDOT has consulted with the Utah State Historic Preservation Officer (SHPO) pursuant to Utah Code Annotated (U.C.A.) §9-8-404; and

**NOW, THEREFORE**, the UDOT and the Utah SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

**STIPULATIONS**

The UDOT shall ensure that the following measures are carried out:

- I. **DOCUMENTATION OF HISTORIC PROPERTIES:** In advance of construction activity, UDOT shall record the one (1) historic property according to the following measures:
  - A. UDOT shall record the property located at **2905 South 1700 West, Lehi**. Submittals to the SHPO will include ILS forms and photographs. Photographs shall be taken and submitted in either a digital or standard film format. Digital photographs shall be submitted on a gold CD, with photographs printed in black and white on glossy, high quality photo paper. Photographs taken with standard film shall be submitted as 3-1/2 x 5" black and white prints printed on glossy, high-quality photo paper, and submitted with the negatives.
- II. **REPORTING:** The UDOT shall ensure that any/all reports on activities carried out pursuant to this agreement are provided to the SHPO, and upon request, to any other interested parties.
- III. **PERSONNEL QUALIFICATIONS:** The UDOT shall ensure that all historic work carried out pursuant to this agreement is completed by or under the direct supervision of a person or persons meeting or exceeding the Secretary of the Interior's Historic Preservation Professional Qualification Standards for History (36 CFR 61 Appendix A).
- IV. **DURATION:** This agreement will be null and void if its terms are not carried out within five (5) years from the date of its execution. Prior to such time, the UDOT may consult with the SHPO to reconsider the terms of the agreement and amend it following Stipulation VII below.
- V. **DISCOVERY:** In accordance with U.C.A. 9-8-404, the UDOT is providing for the protection, evaluation, and treatment of any historic property discovered prior to or during construction. UDOT Standard Specifications Section 01355, Part 1.13, Discovery of Historical, Archaeological or Paleontological Objects, Features, Sites, Human Remains, Migratory Avian Species, will be enforced during this project. This specification stipulates procedures to be followed should any archaeological, historic, or paleontological resources be discovered during construction of the project. These procedures are as follows:
  - A. Immediately suspend construction operations in the vicinity of the discovery if a suspected historic, archaeological or paleontological item, feature, or site is encountered, or if suspected human remains are encountered.

East-West Connector MOA, 1



I-15 MOA

- B. Verbally notify the Engineer of the nature and exact location of the findings.
- C. The Engineer contacts the UDOT region staff archaeologist, who will assess the nature of the discovery, and determine the necessary course of action.
- D. Notify the Engineer who in turn notifies the Region Environmental Manager and the UDOT Wildlife Biologist if bats or migratory birds are discovered on structures.
- E. Protect the discovered objects or features and provide written confirmation of the discovery to the Engineer within two calendar days.
- F. The Engineer keeps the Contractor informed concerning the status of the restriction.
  - 1. The time necessary to handle the discovered item, feature, or site is variable, dependent on the nature and condition of the discovered item.
  - 2. The Engineer will provide written confirmation when work may resume.
- G. If a changed condition is approved, it will be controlled in accordance with Section 00725, paragraph: Differing Site Conditions.

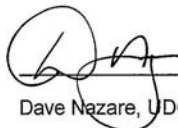
Should a discovery occur, the UDOT will consult with the SHPO toward developing and implementing an appropriate treatment plan prior to resuming construction.

- VI. **DISPUTE RESOLUTION:** Should either party to this agreement object at any time to any actions proposed or the manner in which the terms of this MOA are implemented, the UDOT shall consult with the objecting parties to resolve the objection. The UDOT's responsibility to carry out all other actions subject to the terms of this MOA that are not the subject of the dispute remain unchanged. The UDOT will notify all parties of its decision in writing before implementing that portion of the undertaking subject to dispute under this stipulation. The UDOT's decision will be final. Further, should a member of the public object at any time during implementation of the measures stipulated in this agreement, the UDOT shall take the objections into account and consult as needed with the objecting party and the SHPO to resolve the objection.
- VII. **AMENDMENTS AND NONCOMPLIANCE:** If either signatory to this MOA, determines that its terms will not or cannot be carried out or that an amendment to its terms must be made, that party shall immediately consult with the other parties to develop an amendment to this MOA. The MOA may be amended only upon written concurrence of the signatories. If the signatories cannot agree to appropriate terms to amend the MOA, any signatory may terminate the agreement in accordance with Stipulation VIII, below.
- VIII. **TERMINATION:** If an MOA is not amended following the consultation set out in Stipulation VII, it may be terminated by any signatory. Within 30 days following termination, the UDOT shall notify the signatories if it will initiate consultation to execute an MOA with the signatories.

Execution of this Memorandum of Agreement by the UDOT and the Utah SHPO pursuant to U.C.A. 9-8-404 prior to UDOT's approval of this undertaking, and implementation of its terms, serves as evidence that the UDOT has taken into account the effects of this undertaking on historic properties for **PROJECT NUMBER: S-R399(12); EAST-WEST CONNECTOR PROJECT, LEHI, UTAH COUNTY.**

**SIGNATORIES:**

UTAH DEPARTMENT OF TRANSPORTATION



Dave Nazare, UDOT Region 3 Director

6-4-08

Date

UTAH STATE HISTORIC PRESERVATION OFFICE



Wilson G. Martin, Utah SHPO

6/19/2008

Date

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